Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A method for the contactless ignition of a welding arc, in which high-frequency ignition pulses are applied between the welding electrode and the workpiece to be worked to ionize the gap between the welding electrode and the workpiece, and in which the welding current is connected after the ignition of the welding arc, wherein several pulse packets (44) with presettable frequencies and~~, in particular,~~ packet period durations (47), or time periods, are applied, wherein several successive ignition pulses (45) are emitted in a pulse packet (44) and a packet interval (46) is each executed between said pulse packets (44), so that overall energy expenditure during ignition can be minimized even while having a maximum energy in each ignition pulse.

Claim 2. (Currently Amended) An ignition method according to claim 1, wherein the ignition pulses (45) emitted in a pulse packet (44) are changed in respect to at least one of their number, ~~and/or~~ frequency and~~, in particular,~~ ignition period duration (50).

Claim 3. (Currently Amended) An ignition method according to claim 1 wherein the ~~ratio of the~~ packet period duration (47) is greater than ~~to~~ the duration of the ignition pulses~~ (45), i.e. the ignition period duration (50), is high~~.

Claim 4. (Currently Amended) An ignition method according to claim 1, wherein the ignition pulses (45) within a pulse packet (44) are applied at an ignition period duration (50) of between 25 µs and 1 ms~~, preferably 125 µs~~.

Claim 5. (Currently Amended) An ignition method according to claim 1, wherein the pulse packets (44) are applied at a packet period duration (47) of between 1 ms and 1 s~~, preferably 100 ms~~.

Claim 6. (Previously Presented) An ignition method according to claim 1, wherein the welding current is applied for a defined time period following the first ignition pulse (45).

Claim 7. (Currently Amended) An ignition method according to claim 1, wherein the time period (48) of the pulse packets (44) and the number of ignition pulses (45) per pulse packet (44), respectively, are adjusted or generated as a function of the adjusted welding parameters ~~such as, e.g., the material of the workpiece (16) to be worked, the material of the welding electrode (27), a protective gas (8) employed, etc~~.

Claim 8. (Currently Amended) A circuit for the contactless ignition of a welding arc, including a charge circuit (31), at least one pulse capacitor (30), at least one discharge circuit containing a switch, and a high-voltage transformer (32) for coupling to the welding electrode (27) the high-frequency ignition pulses discharged from the pulse capacitor (30) via the switch, wherein a pulse compression circuit (40) connected with the charge circuit (31) is provided, comprising the pulse

capacitor (30), the high-voltage transformer (32) and the switch, said switch being formed by a magnetic inductor (41) so as to ensure the high-frequency switching of the ignition pulses, and further comprising a device for controlling the ignition pulses, which is connected with the charge circuit, said device for controlling adapted to provide several successive ignition pulses in a pulse packet and a packet interval between each pulse packet.

Claim 9. (Previously Presented) An ignition circuit according to claim 8, wherein the pulse compression circuit (40) is comprised of two or several consecutively arranged stages, each stage containing at least one pulse capacitor (30), a switch formed by a magnetic inductor (41) and a high-voltage transformer (32).

Claim 10: Canceled.

Claim 11. (Currently Amended) An ignition circuit according to claim ~~10~~ 8, wherein the control device (4, 38) is connected

with a current source (2) to control the instant of the connection of the welding current upon completion of the ignition.

Claim 12 (New): An ignition method according to claim 4, wherein the ignition pulses (45) within a pulse packet (44) are applied at an ignition period duration (50) of 125 µs.

Claim 13 (New): An ignition method according to claim 5, wherein the pulse packets (44) are applied at a packet period duration (47) of 100 ms.